PROJECT DESCRIPTION	EQUIPMENT LIST "A"	EQUIPMENT LIST "B"
THIS PORTION OF THE PROJECT INVOLVES THE RECONSTRUCTION OF THE EXISTING TRAFFIC CONTROL SIGNALS AT THE INTERSECTIONS OF PENNSYLVANIA/MAUGANS AVENUE AND MACK TRUCK ROAD/MAUGANS AVENUE. NEW TRAFFIC SIGNALS	A. EQUIPMENT TO BE SUPPLIED BY SHA	B. EQUIPMENT TO BE FURNISHED AND OR INSTALLED BY THE CONTRACTOR
WILL BE CONSTRUCTED AT THE INTERSECTIONS OF MAUGANS AVENUE AND THE INTERSTATE 81 RAMPS WITH FOUNDATIONS	QUANTITY DESCRIPTION	QUANTITY DESCRIPTION
AND CONDUIT PLACED FOR FUTURE SIGNALS AT MAUGANS AVENUE AND CRAYTON BOULEVARD. MAUGANS AVENUE IS ASSUMES TO RUN IN A EAST-WEST DIRECTION	1 EACH FOUR PHASE, FULL-TRAFFIC-ACTUATED CONTROLLER WITH INTERSECTION MONITOR HOUSED IN NEMA SIZE "6" BASE MOUNTED CABINET	LUMP SUM MAINTENANCE OF TRAFFIC
INTERCECTION OREDATION	42 S.F. SHEET ALUMINUM SIGNS TO CONSISTS OF:	20 C.Y. TEST PIT EXCAVATION
INTERSECTION OPERATION	- 1 EACH R3-1 SIGN (30 IN. X 30 IN.) - MAST ARM MOUNT	1 EACH STEEL POLE WITH TWIN 50 FT. MAST ARMS
A SYSTEM CONTROLLER HOUSED IN A BASE MOUNTED CABINET SHALL BE INSTALLED AT THIS LOCATION. THE INTERSECTION	- 1 EACH R3-2 SIGN (30 IN. X 30 IN.) - MAST ARM MOUNT - 1 EACH R3-5L SIGN (30 IN. X 36 IN.) - MAST ARM MOUNT	1 EACH STEEL POLE WITH 50 FT. MAST ARMS
WILL OPERATE IN A FULLY ACTUATED MODE USING FOUR (4) NEMA PHASES. EXCLUSIVE/PERMISSIVE LEFT TURN PHASING WILL BE PROVIDED FOR EAST AND NORTHBOUND APPROACHES.	- 2 EACH 3-4 SIGN (30 IN. X 30 IN.) - MAST ARM MOUNT - 1 EACH S-4 SIGN (16 IN. X 39 IN.) - MAST ARM MOUNT	1 EACH STEEL PEDESTAL POLE
	- 1 EACH S-7 SIGN (24 IN. X 30 IN.) - MAST ARM MOUNT	9 C.Y. CONCRETE FOR SIGNAL FOUNDATIONS
CONTROLLER REQUIREMENTS	1 EACH VIDEO INTERFACE EQUIPMENT: 1-4 CAMERAS	460 L.F. NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
INSTALL A FULL-TRAFFIC ACTUATED, EIGHT-PHASE CONTROLLER WITH ONE (1) FOUR CHANNEL, INTERSECTION MONITOR WITH		480 L.F. 3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
BATTERY BACKUP FOR PHONE DROP AND ASSOCIATED HARNESSES IN A NEMA SIZE "6" BASE MOUNTED CABINET.		100 L.F. 3 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED
PHONE DROP		190 L.F. 3 INCH SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED
		40 L.F. 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL NOTIFY DAVE SHRADER OF THE WASHINGTON COUNTY HIGHWAY DEPARTMENT AT 240-313-2715 TO ARRANGE FOR THE PHONE LINE INSTALLATION. THE CONTRACTOR IS TO PROVIDE		180 L.F. 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED
MR. SHRADER THE NEAREST STREET ADDRESSES, ZIP CODES, AND PHONE NUMBERS FOR EACH INTERSECTION.		
		120 L.F. 2 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED
		190 L.F. 2 INCH SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED
MAINTENANCE OF TRAFFIC	EQUIPMENT LIST "C"	20 L.F. 1INCH FLEXIBLE TUBING
THE TOLERO CONTOOL DI ANO DOCUMED MUTURI THE OFT OF CONCEDITION DI ANC CHALL DE LICED FOR THE DOCUMENT	C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA.	1 EACH ELECTRICAL UTILITY SERVICE EQUIPMENT W/ 200 AMP METER PEDESTAL
THE TRAFFIC CONTROL PLANS PROVIDED WITHIN THIS SET OF CONSTRUCTION PLANS SHALL BE USED FOR THE PROJECT.		3 EACH FURNISH AND INSTALL OPTICOM EMERGENCY VEHICLE PRE-EMPTION DETECTOR EYE
	SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILLARY EQUIPMENT FROM THE CONTROLLER CABINET. THE CABINET AND ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME PROPERTY	75 L.F. ELECTRICAL CABLE 1-CONDUCTOR NO. 4 AWG-THHN/THWN
PROJECT CONTACTS	OF THE CONTRACTOR.	9 EACH FURNISH AND INSTALL HANDHOLE
FROJECT CONTACTS		42 S.F. INSTALL OVERHEAD AND POLE MOUNTED SIGN
THE CONTACT PERSONS FOR THE WASHINGTON COUNTY ENGINEERING DEPARTMENT AS AS FOLLOWS:		3 EACH VIDEO DETECTION CAMERA
TBD MR. DAVE SHRADER		2 EACH CONTROL CABLE, 150 FT, VIDEO CAMERA TO CONTROLLER
PROJECT MANAGER SIGNAL OPERATIONS PHONE: 313-240-2417 PHONE: 240-313-2720		1 EACH CONTROL CABLE, 200 FT, VIDEO CAMERA TO CONTROLLER
		1 EACH 10 FOOT BREAKAWAY PEDESTAL
MR. DAVID A. MASON MR. ROBERT SLOCUM DESIGN ENGINEER DEPUTY CHIEF ENGINEER		2 EACH FURNISH AND INSTALL 250 WATT HIGH PRESSURE SODIUM LAMP AND LUMINAIRE
PHONE: 240-313-2408 PHONE: 240-313-2418		2 EACH 15 FT LIGHTING ARM
CONTACT PERSONS FOR MD-SHA ARE AS FOLLOWS:		6 EACH GROUND ROD - 0.75 INCH DIAMETER X 10 FT LENGTH
MR. GEORGE H. SMALL		3 EACH 8 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION
ASSISTANT DISTRICT ENGINEER - TRAFFIC (301) 729-8444		25 EACH 12 INCH LEC VEHICULAR TRAFFIC SIGNAL HEAD SECTION
MR. JOHN TRUE		250 L.F. ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG)
ASSISTANT DISTRICT ENGINEER - CONSTRUCTION (301) 729-8411		350 L.F. ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG)
MR. TONY CRAWFORD		
ASSISTANT DISTRICT ENGINEER - MAINTENANCE (301) 729-8457 HANDHOLE	OCATIONS' SIGNAL POLE LOCATIONS'	420 L.F. ELECTRICAL CABLE - 3 CONDUCTOR (NO. 14 AWG)
MR. ROBERT ROWAN	OUATIONS SIGNAL FOLL LOCATIONS	50 L.F. ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
UTILITY ENGINEER NO. DESCRIPTION OF LOCATION	STATION OFFSET DESCRIPTION OF LOCATION STATION OFFSET	490 L.F. ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
(301) 729-8439 9 81 NB RAMP @ POLE B	27+93.23 65.15' LT 81 NB RAMP - POLE A 28+62.82 13.28' LT	660 L.F. ELECTRICAL CABLE - 24 CONDUCTOR (NO. 14 AWG)

CONTACT PERSONS FOR	OOPS ARE AS F	OLLOWS:
UTILITY ENGINEER (301) 729-8439		
MR. ROBERT ROWAN		

MR. RICHARD DAFF, SR. CHIEF TRAFFIC OPERATIONS (410) 787-7630

MR. ROBERT SNYDER ASSISTANT DIVISION, CHIEF TRAFFIC OPERATIONS (410) 787-7630 MR. ED RODENHIZER

CHIEF, SIGNAL OPERATIONS (410) 787-7630 MR. EUGENE BAILEY CHIEF, SIGN OPERATIONS

MR. MIKE STOCKER SIGNAL SHOP WAREHOUSE (410) 787-7696

(410) 787-7676

	HANDHOLE L	OCATIO	NS'	SIGNAL POLE LOCATIONS ²			
NO.	DESCRIPTION OF LOCATION	STATION	OFFSET	DESCRIPTION OF LOCATION	STATION	OFFSET	
9	81 NB RAMP @ POLE B	27+93.23	65.15' LT	81 NB RAMP - POLE A	28+62.82	13.28' LT	
10	FUTURE INTERCONNECT	27+88.57	49.88' LT	81 NB RAMP - POLE B	27+90.41	65.24' LT	
11	81 NB RAMP @ POLE J	28+59.33	50.00' LT	81 NB RAMP - POLE J	28+57.47	47.72' LT	
12	FUTURE INTERCONNECT	28+80.95	63.41' LT	CONTROLER BOX LOCATIONS			
13	81 NB RAMP @ QUADRAPOLE	29+33.33	309.49' LT				
13A	81 NB RAMP	28+88.87	119.17' RT	DESCRIPTION OF LOCATION	· STATION	OFFSET	
14	FUTURE INTERCONNECT	28+92.39	57.32' LT	81 NB RAMP	28+80.96	74.60' LT	
15	81 NB RAMP @ POLE A	28+63.56	15.74' LT			•	
16	FUTURE INTERCONNECT	30+79.55	44.73' LT	•			
APF STA CEN STA	ATION/OFFSET LOCATIONS ARE PROXIMATE CENTER OF THE HAITION/OFFSET LOCATIONS ARE NOTER OF THE POLE. ATION/OFFSET LOCATIONS ARE NOTER OF THE CONTROLLER BOX	NDHOLE. BASED ON TH BASED ON TH	E				

APPROVALS

SHA No.: BW707M83 Maughan's Avenue: I-81 to US 11



STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION

OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION MAUAGNS AVENUE AND

I-81 NORTHBOUND RAMPS

MAUGANS AVE. & PENNSYLVANIA RECONSTRUCTION SIGNAL PLANS - NOTES -81 NORTHBOUND RAMP

TRAFFIC SIGNAL PLANS

SAW CUT FOR SIGNAL (QUADRAPOLE)

INSTALL MASTER CONTROLLER AND CABINET - BASE MOUNT

AS SHOWN SHEET NO. SP-04

PROJECT NO. 10-140 DWG. No. 61 OF 146

SCALE